## **ABSTRACT**

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## MANAGEMENT OF COMMUNICATION NETWORKS

A communication network having a plurality of ports modelled according to a layer protocol and partitioned into a plurality of subnetworks, is managed by a network management system that generates, in respect of a subnetwork, an off-network pointer exiting the subnetwork at one of the ports. This enables a traffic carrying capability to be built up externally to the subnetwork. The off-network pointer can be used to derive other implied off-network pointers at logical layers/protocols internally in the network and potentially on different network devices. The management system can also establish connections between connection termination points at the edges of partitions and can identify stranded bandwidth in order to release it and to enable trails to be built up piecemeal.